Methionyl tRNA synthetase cloned DNA sequence [SEQ ID NO:1]

1 ATGGCTAAAG AAACATTITA TATAACAACC CCAATATACT ATCCTAGTGG
51 GAATTTACAT ATAGGACATG CATATTCTAC AGTGGCTGGA GATGTTATTG
51 CAAGATATAA GAGAATGCAA GGATATGATG TTCGTTATTT GACTGGAACG
101 CAAGATATAA GAGAATGCAA GGATATGATG TTCGTTATTT GACTGGAACG
201 AGAAATTGAA TATTTGGATG AGATGATTGC TGGAATTAAA CAATTGTGGGG
251 CTAAGCTTGA AATTTCAAAT GATGATTTTA TCAGAACAAC TGAAGAACGT
301 CATAAACATG TCGTTGAGCA AGTGTTTTGAA CGTTTATTAA AGCAAGGTGA
351 TATCTATTTA GGTGAATATG AAGGTTGGTA TTCTGTTCCG GATGAAACAT

FIG 1

01	ACTATACAGA	ACTATACAGA GTCACAATTA GTAGACCCAC AATACGAAAA	GTAGACCCAC		CGGTAAAATT	
51	ATTGGTGGCA	ATTGGTGGCA AAAGTCCAGA TTCTGGACAC		GAAGTTGAAC	TAGTTAAAGA	
01	AGAAAGTTAT	AGAAAGTTAT TTCTTTAATA	TTAGTAAATA	TACAGACCGT	TTATTAGAGT	
51	TCTATGACCA	AAATCCAGAT	TTTATACAAC	TCTATGACCA AAATCCAGAT TTTATACAAC CACCATCAAG AAAAAATGAA	ААААААТGАА	
01	ATGATTAACA	ATGATTAACA ACTTCATTAA ACCAGGACTT GCTGATTTAG	ACCAGGACTT	GCTGATTTAG	CTGTTTCTCG	
51	TACATCATTT	AACTGGGGTG	TCCATGTTCC	TACATCATTT AACTGGGGTG TCCATGTTCC GTCTAATCCA AAACATGTTG	AAACATGTTG	
01	TTTATGTTTG	TTTATGTTTG GATTGATGCG	TTAGTTAACT ATATTTCAGC		ATTAGGCTAT	
51	TTATCAGATG	ATGAGTCACT	ATTTAACAAA	TTATCAGATG ATGAGTCACT ATTTAACAAA TACTGGCCAG CAGATATTCA	CAGATATTCA	
01	TTTAATGGCT	AAGGAAATTG	TGCGATTCCA CTCAATTATT		TGGCCTATTT	

FIG 1A

1201	1151	1101	1051	1001	951	901 '	851
GCTTTAGAAA	CAGCGTATCA	AGTAAACCGT	GCATTTGTTG	ATCTAATGCG	AGACCCTAAT	TGGATTTTGA	TATTGATGGC
CAGTGAAAAG	AGGTCCACTT	ACGATTTCTA	AGCGTACAAA		ATTTTAATTG	TGAAAGATGG	ATTAGACTTA
CTACACTGAA	CATGAATTAG	TGGTTAATAA	TTTCGATCTA	TGAATTACCA TTTGGTTCAG	ATCGCTATGG TTTAGATGCT	AAAAATGAGT	CCGTTACCTA
GCTTTAGAAA CAGTGAAAAG CTACACTGAA AGCATGGAAA GTTTGCAATT	CAGCGTATCA AGGTCCACTT CATGAATTAG ATGAAGAAAT GGAAGCTATG	AGTAAACCGT ACGATTTCTA TGGTTAATAA GTACTTTGAT GGCGAATTAC	GCATTTGTTG AGCGTACAAA TTTCGATCTA GCAAATGACT	ATGCCGTATT	TTTAGATGCT i	TGAAAGATGG AAAAATGAGT AAATCTAAAG GTAATGTTGT	TATTGATGGC ATTAGACTTA CCGTTACCTA AAAAAGTCTT TGCACATGGT
GTTTGCAATT	GGAAGCTATG	GGCGAATTAC	TAGGTAACTT	TACACCTGAA	ACACGTTATT	GTAATGTTGT	TGCACATGGT

FIG 1B

251	TTCTGTGGCA	TTCTGTGGCA TTATCTACGG	TATGGAAGTT TATAAGTAGA ACGAATAAGT	TATAAGTAGA	ACGAATAAGT
301	ATATTGACGA	AACAACGCCT	ATATTGACGA AACAACGCCT TGGGTATTAG CTAAGGACGA	CTAAGGACGA	TAGCCAAAAA
351	GATATGTTAG	GCAATGTAAT	GGCTCACTTA GTTGAAAATA	GTTGAAAATA	TTCGTTATGC
401	AGCTGTATTA	TTACGTCCAT	AGCTGTATTA TTACGTCCAT TCTTAACACA TGCGCCGAAA		GAGATTTTTG
451	AACAATTGAA	CATAAACAAT	AACAATTGAA CATAAACAAT CCTCAATTTA TGGAATTTAG		TAGTTTAGAG
501	CAATATGGTG	TGCTTACTGA	CAATATGGTG TGCTTACTGA GTCAATTATG GTTACTGGGC AACCTAAACC	GTTACTGGGC	AACCTAAACC
551	TATTTTCCCA	AGATTGGATA	GCGAAGCGGA AATTGCATAT		ATCAAAGAAT
601	CAATGCAACC	GCCTGCTACT	CAATGCAACC GCCTGCTACT GAAGAGGAAA AAGAAGAGAT TCCTAGCAAA	AAGAAGAGAT	TCCTAGCAAA
651	CCTCAAATTG	ATATTAAAGA	CCTCAAATTG ATATTAAAGA CTTTGATAAA GTTGAAATTA	GTTGAAATTA	AGGCAGCAAC

FIG 1C

			5/7	77	
1701	GATTATTGAT	GCTGAACATG	GATTATTGAT GCTGAACATG TTAAGAAGTC AGATAAGCTT TTAAAAATT	AGATAAGCTT	TTAAAAATT
1751	AAGTAGACTT	AGATTCTGAA	AAGTAGACTT AGATTCTGAA CAAAGACAAA TTGTATCAGG AATTGCCAA	TTGTATCAGG	AATTGCCAA
1801	TTCTATACAC	CAGATGATAT	TTCTATACAC CAGATGATAT TATTGGTAAA AAAGTAGCAG TTGTTACTA	AAAGTAGCAG	TTGTTACTA
1851	CCTGAAACCA	GCTAAATTAA	CCTGAAACCA GCTAAATTAA TGGGACAAAA ATCTGAAGGT ATGATATTA	ATCTGAAGGT	ATGATATTA
1901	CTGCTGAAAA	AGATGGTGTA	CTGCTGAAAA AGATGGTGTA TTAACCTTAG TAAGTTTACC AAGTGCAAT	TAAGTTTACC	AAGTGCAAT
1951	ССАВАТССТС САСТСАТТАВ АТАВ	САСТСАТТАА	АТАА		

FIG

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Methionyl tRNA synthetase deduced amino acid sequence [SEQ ID NO:2]

Р	MAKETFYITT	MAKETFYITT PIYYPSGNLH	IGHAYSTVAG	DVIARYKRMQ	GYDVRYLTGT	
51	DEHGQKIQEK	AQKAGKTEIE	YLDEMIAGIK	DEHGQKIQEK AQKAGKTEIE YLDEMIAGIK QLWAKLEISN DDFIRTTEER	DDFIRTTEER	
101	HKHVVEQVFE	RLLKQGDIYL	GEYEGWYSVP	DETYYTESQL VDPQYENGKI	VDPQYENGKI	
151	IGGKSPDSGH	EVELVKEESY	FFNISKYTDR	IGGKSPDSGH EVELVKEESY FFNISKYTDR LLEFYDQNPD FIQPPSRKNE	FIQPPSRKNE	
201	MINNFIKPGL	ADLAVSRTSF	NWGVHVPSNP	KHVVYVWIDA LVNYISALGY	LVNYISALGY	
251	LSDDESLFNK	YWPADIHLMA	KEIVRFHSII	LSDDESLFNK YWPADIHLMA KEIVRFHSII WPILLMALDL PLPKKVFAHG	PLPKKVFAHG	
301	WILMKDGKMS	KSKGNVVDPN ILIDRYGLDA		TRYYLMRELP	FGSDGVFTPE	
351	AFVERTNFDL	ANDLGNLVNR	TISMVNKYFD	AFVERTNFDL ANDLGNLVNR TISMVNKYFD GELPAYQGPL HELDEEMEAM	HELDEEMEAM	
101	ALETVKSYTE	SMESLQFSVA	LSTVWKFISR	LSTVWKFISR TNKYIDETTP WVLAKDDSQK	WVLAKDDSQK	

FIG 2

651	601	551	501	451
PNGAVIK	FYTPDDIIGK	PQIDIKDFDK	QYGVLTESIM	DMLGNVMAHL
	FYTPDDIIGK KVAVVTNLKP AKLMGQKSEG MILSAEKDGV LTLVSLPSAI	PQIDIKDFDK VEIKAATIID AEHVKKSDKL LKIQVDLDSE QRQIVSGIAK	QYGVLTESIM VTGQPKPIFP RLDSEAEIAY IKESMQPPAT EEEKEEIPSK	DMLGNVMAHL VENIRYAAVL LRPFLTHAPK EIFEQLNINN PQFMEFSSLE
	AKLMGQKSEG	AEHVKKSDKL	RLDSEAEIAY	LRPFLTHAPK
	MILSAEKDGV	LKIQVDLDSE	IKESMQPPAT	EIFEQLNINN
	LTLVSLPSAI	QRQIVSGIAK	EEEKEEIPSK	PQFMEFSSLE

FIG 2A